

REMARKS

Claim Rejections—35 U.S.C. §103

Claims 32 and 46-53 are rejected under 35 U.S.C. §103(a) as being unpatentable due to obviousness over United States Patent No. 5,804,021 issued to Abuto et al. (“Abuto”) in view of United States Patent Application 2001/0008676 by Pelkie et al. further in view of United States Patent Application 2004/0005835 by Zhou et al. (“Zhou”) or United States Patent No. 6,468,630 issued to Mishima et al. (“Mishima”).

Applicants have amended the claims to more clearly define the invention and respectfully request reconsideration of the rejections and issuance of a Notice of Allowance. Support for the amendments is present throughout the specification, for example see paragraphs [0033] and [0041] of the specification as originally filed.

The claims as currently amended are not unpatentable as obvious over Abuto in view of any combination of Pelkie et al, Zhou, and/or Mishima. The Supreme Court has enunciated the four factual inquiries required to determine obviousness: (A) determining the scope and contents of the prior art; (B) ascertaining the differences between prior art and the claims in issue; (C) resolving the level of ordinary skill in the pertinent art; and (D) evaluating evidence of secondary considerations. The Supreme Court reaffirmed and relied upon the Graham four pronged test in its consideration and determination of obviousness in the fact situations presented in *KSR v. Teleflex*, 127 S. Ct. 1727 (2007); *Sankraid v. Ag Pro, Inc.*, 425 U.S. 273, 189 U.S.P.Q. 449, *reh’g denied*, 426 U.S. 955 (1976); and *Anderson’s-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 163 U.S.P.Q. 673 (1969).

Under *KSR* and subsequent examination guidelines issued by the USPTO, a rejection on grounds of obviousness requires an Office Action to have “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” 72 Fed. Reg. 57,526 (2007).

According to the above referenced Office Action, Applicants' invention is obvious in view of combination of the cited prior art references. Applicants respectfully submit that the claims as currently amended are not obvious for the following reasons: there is no teaching, suggestion, or motivation to combine the cited references, the cited prior art does not include all claimed limitations, and the prior art teaches away from the claimed invention. The teaching/suggestion/motivation test requires that "a person of ordinary skill in the art would have been motivated to combine the prior art to achieve the claimed invention and that there would have been a reasonable expectation of success." *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed. Cir. 2006). The prior art fails this test because collectively, the references contain no teaching, suggestion, or motivation to combine the prior art. More importantly, when combined, the cited prior art fails to contain all of the claimed limitations of Applicants' invention. The USPTO guidelines state that in order for an invention to be deemed obvious upon combination of the prior art, there must be "a finding that the prior art included each element claimed." 72 Fed. Reg. 57,526 (2007); *see also* MPEP § 2143.03. There are significant differences between the combination of the prior art and the claims; Applicants' uniquely claim a three-dimensional webbed inelastic material combined with a retractive force mechanism. The prior art teaches away from these claims; in addition to the common use of elastics, the prior art references acknowledge their inventions' purpose as making better use of elastics rather than exploiting the benefits of inelastic materials like Applicants.

Elastic Materials Have Two Properties

Applicants and prior art references manufacture products used to make the fit of garments adjustable. Collectively, the cited prior art has relied upon elastics to achieve this task. According to the specification of the subject application, materials must have two properties in order to meet the definition of elasticity. First, the material must be "stretchable at least about 60 percent, (*i.e.* to a

stretched, biased length that is at least about 160 percent of its relaxed unbiased length).” Second, the material must “recover at least 55 percent of its elongation upon release of the stretching.” This property is commonly referred to as retractive force. Materials without these two properties do not meet the definition of elastic, though they may possess relative degrees of stretchability to each other. *See* paragraph [0025] of the specification as originally filed. Prior art acknowledges the distinction between elastics and stretchable materials. For example, Abuto notes that “stretchable materials are distinguishable from elastic materials in that stretchable materials can be expanded in length but they do not necessarily retract back from their expanded length.” *See* Abuto, BACKGROUND OF THE INVENTION, column 1, lines 36-39.

Elastic Materials Have Two Disadvantages in Manufacture

Elastic materials are disadvantageous to manufacture for two reasons. First, elastic materials are significantly more expensive to manufacture than non-elastic materials. Second, “elastic materials typically stretch in all directions, thus requiring extra care during processing.” The required extra care increases the complexity and further increases the costs of manufacture. *See* paragraph [0003] of the specification as originally filed.

Claimed Webbed Materials are Stretchable but Not Elastic

The claimed webbed materials are sufficiently stretchable for use in garments, but do not meet the elongation requirements for elastics. Additionally, the claimed webbed materials do not qualify as elastics because their retractive forces are much too weak. Applicants have amended the claims to clearly specify the inelastic nature of the claimed webbed materials. The reduced stretchability of the claimed webbed materials solves the manufacturing and cost problems associated with elastics, however, unless the retractive forces of webbed materials are improved, they are not

candidates to function in place of elastics. *See* paragraph [0004] of the specification as originally filed.

Retractive Force Mechanisms are Not Elastic

Retractive force mechanisms increase the retractive forces of a given material independent of and in addition to the material's intrinsic retractive forces through materials or processing methods. Applicants have amended the claims to clearly specify the supplementary nature of the retractive force mechanisms. While this mechanism achieves the retractive abilities necessary for garments, it lacks the necessary stretchability to function in place of elastics. *See* paragraph [0033] of the specification as originally filed.

Applicants' Invention Uniquely Combines a Three-Dimensional Webbed Inelastic Material and a Retractive Force Mechanism

As shown in the preferred embodiment, Applicants combine "a three-dimensional web of inelastic material having elongated cells aligned to provide mechanical elasticity perpendicular to the aligned elongated apertures, and a retractive force mechanism to provide increased retractive force in the direction of mechanical elasticity." *See* paragraph [0041] of the specification as originally filed. As explained in the previous sections of these Remarks, materials can be stretchable without being elastic. Applicants capitalize on the stretchability of inelastic webbed materials by supplementing them with a retractive force mechanism. This combination allows Applicants to achieve superior results to the cited prior art.

Prior Art Teachings Rely on Elastics

Prior art references cited by the Office Action rely on elastics in the manufacture of garments. Whether by using elastics exclusively or in combination with inelastics in a laminate, each prior art

reference passively accepts the limitations of elastics and fails to address, consider, or anticipate solutions for the disadvantages of elastics.

Abuto teaches the manufacture of “elastic fibrous non-woven laminates that are elastic in at least one direction, and, if desired, two directions...” *See* Abuto, FIELD OF INVENTION, column 1, lines 12-13. While Abuto can include inelastic layers, the above reference shows Abuto always includes elastic material, and Abuto acknowledges that the purpose of the invention is to “quickly and simply create elastic laminates.” *See* Abuto, BACKGROUND OF THE INVENTION, column 2, lines 2-3.

Mishima teaches “a flat sheet material intrinsically having an elastic stretchability in the longitudinal direction...and a plurality of elastic threads being stretchable in the transverse direction...” *See* Mishima, ABSTRACT. Mishima goes on to explain that the combination including “elastic” threads allows for the sheet to be stretchable in both longitudinal and transverse directions. *See* Mishima, DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS, column 2, lines 19-21, 37-40.

The Pelkie et al. invention consists of an apertured elastomeric film. U.S. Patent No. 6,303,208, to Pelkie, discloses the meaning of elastomeric by stating, “it is to be understood that the terms ‘elastic’ and ‘elastomeric’ can be used interchangeably...” *See* Pelkie, DISCLOSURE OF THE INVENTION, column 2, lines 35-39. Like Abuto, the Pelkie et al. invention includes at least one elastic layer, and Pelkie cites the invention’s purpose as achieving “better elastic performance.” *See* Pelkie et al., HISTORY OF RELATED ART, paragraph [0006].

Zhou teaches “an elastic strand laminate made up of elastic strands self-adhered to one or more facing sheets.” *See* Zhou, BACKGROUND OF THE INVENTION, paragraph [0002]. Zhou not only clearly teaches elastics as part of the invention, but also states that the purpose of the invention is “directed to an elastic strand laminate having superior elastic and adhesion properties.” *See* Zhou, SUMMARY OF THE INVENTION, paragraph [0011].

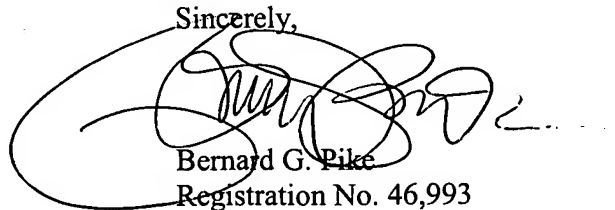
Abuto, Mishima, Pelkie et al., and Zhou all teach the use of elastics and direct their inventions towards the exploitation of elastics rather than resolving its limitations. While some of the prior art references contain inelastic material, no reference contains a three-dimensional webbed inelastic material or an independent retractive force mechanism.

CONCLUSIONS

Applicants believe that they have fully addressed each basis for the rejections under 35 U.S.C. §103 in the Office Action. Reconsideration of the claims of the subject application and issuance of a Notice of Allowance is respectfully requested. Should the Examiner have any remaining concerns, he is requested to contact the undersigned at the telephone number given below so that the concerns may be resolved with issuance of an additional Office Action.

No fees beyond the concurrently paid filing fees for this application are believed due for this *Response to Office Action*. Nonetheless, authorization to charge deposit account No. 20-1507 is given herein should fees be due.

Sincerely,



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